AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Currently Amended) A composite having two or more layers and comprising:

a layer I obtained from a molding composition comprising:

a) from 0 to 80 parts by weight of a polyamide selected from the group consisting of polyamide 6, polyamide 66, polyamide 6/66 and a mixture thereof;

b) from 0.05 to 100 parts by weight of a polyamine-polyamide copolymer prepared from the following monomers:

α) from 0.5 to 25% by weight, based on the polyamine-polyamide copolymer, of a polyamine having at least 4 nitrogen atoms and having a number-average molecular weight M_n of at least 146 g/mol, and

β) a polyamide-forming monomer selected from the group consisting of a lactam, a ω-aminocarboxylic acid, an equimolar combination of a diamine and a dicarboxylic acid and a mixture thereof; and

c) from 0 to 80 parts by weight of a polyamide selected from the group consisting of polyamide 11, polyamide 12, polyamide 612, polyamide 1012, polyamide 1212 and a mixture thereof;

wherein a total of the parts by weight of components a), b) and c) is 100;

wherein a total amount of said polyamide a) and said polyamine-polyamide copolymer b) contains at least 20 parts by weight of a monomer unit which is obtained

i) by ring-opening polymerization of caprolactam, or

ii) by polycondensing hexamethylenediamine and adipic acid, or

iii) by copolycondensing caprolactam, hexamethylenediamine and adipic acid; and

wherein a total of said polyamine-polyamide copolymer b) and said polyamide c) contains at least 20 parts by weight of a monomer unit which is obtained by polycondensing of ω-aminoundecanoic acid, or ring-opening and polycondensing of laurolactam, or polycondensing of at least one of the following mixtures: a mixture of hexamethylenediamine and 1,12-dodecanedioic acid, a mixture of 1,10-decanediamine and 1,12-dodecanedioic acid, a mixture of 1,12-dodecanediamine and 1,12-dodecanedioic acid.

2. (Previously Presented) The composite according to Claim 1, wherein the molding composition of layer I comprises:

a member selected from the group consisting of at least 0.5 part by weight of component a), at least 0.5 part by weight of component b), at least 0.5 part by weight of component c) and mixtures thereof.

3. (Previously Presented) The composite according to Claim 1, wherein the molding composition of layer I comprises:

a member selected from the group consisting of at least 10 parts by weight of component a), at least 2 parts by weight of component b), at least 10 parts by weight of component c), and mixtures thereof.

4. (Previously Presented) The composite according to Claim 1, wherein the molding composition of layer I comprises:

a member selected from the group consisting of at least 20 parts by weight of component a), at least 5 parts by weight of component b), at least 20 parts by weight of component c), and mixtures thereof.

5. (Previously Presented) The composite according to Claim 1, wherein the molding composition of layer I comprises:

a member selected from the group consisting of at least 30 parts by weight of component a), at least 10 parts by weight of component b), at least 30 parts by weight of component c), and mixtures thereof.

6. (Original) The composite according to Claim 1, wherein the molding composition of layer I comprises at most 70 parts by weight of component a) or at most 80 parts by weight of component b) or at most 70 parts by weight of component c).

7. (Original) The composite according to Claim 1, wherein the molding composition of layer I comprises at most 60 parts by weight of component a) or at most 60 parts by weight of component b) or at most 60 parts by weight of component c).

8. (Original) The composite according to Claim 1, wherein the molding composition of layer I has not more than 40 parts by weight of component b).

9. (Original) The composite according to Claim 1, wherein the polyamine-polyamide copolymer is obtained from 1 to 20% by weight of the polyamine.

10. (Original) The composite according to Claim 1, wherein the polyamine contains at least 8 nitrogen atoms.

11. (Original) The composite according to Claim 1, wherein the polyamine has a number- average molecular weight Mn of at least 500 g/mol.

12. (Original) The composite according to Claim 1, wherein the amino group concentration in the polyamine-polyamide copolymer is in the range from 100 to 2 500 mmol/kg.

13. (Original) The composite according to Claim 1, wherein the molding composition of layer I comprises a block copolymer formed from components a) and c).

14. (Previously Presented) The composite according to Claim 1, wherein the composite comprises at least one layer II obtained from a molding composition based on a member selected from the group consisting of polyamide 11, polyamide 12, polyamide 612, polyamide 1012, polyamide 1212, and mixtures thereof.

15. (Previously Presented) The composite according to Claim 1, wherein the composite comprises at least one layer III obtained from a molding composition based a member selected from the group consisting of on polyamide 6, polyamide 66, polyamide 6/66, and mixtures thereof.

16. (Original) The composite according to Claim 15, wherein the composite has the layer sequence I/III.

17. (Original) The composite according to Claims 14 or 15, wherein the composite has the layer sequence II/I/III.

18. (Original) The composite according to Claims 14 or 15, wherein the composite has a symmetrical structure and either has the layer sequence II/I/II or has the layer sequence II/I/III/I/II.

19. (Original) The composite according to Claim 1, wherein the composite also comprises a regrind layer.

20. (Original) The composite according to Claim 1, wherein the molding composition comprises not more than 50% by weight of an additive.

21. (Original) The composite according to Claim 13, wherein the layer II is the outer layer.

22. (Original) The composite according to Claim 1, wherein one of the layers is electrically conductive.

23. (Previously Presented) A hollow article or hollow profile, comprising:
the composite according to Claim 1, and
an internal electrically conductive layer.

24. (Original) The composite according to Claim 1, wherein the composite is a tube.

25. (Original) The composite according to Claim 24, wherein at least one region of the composite is corrugated.

26. (Original) The composite according to Claim 1, wherein the composite is a hollow article.

27. (Previously Presented) A hollow article or hollow profile, comprising:

the composite according to Claim 1, and

an elastomer layer adjacent to an outermost layer.

28. (Original) The composite according to Claim 1, wherein the composite is a fuel piping, a brake-fluid piping, a coolant piping, a hydraulic-fluid piping, a fuel-pump piping, an air- conditioner piping, or a vapor line.

29. (Previously Presented) The hollow article or hollow profile according to Claim 27, which is a container, or a filler pipe.

30. (Original) The composite according to Claim 1, wherein the composite is a film.

31. (Original) The composite according to Claim 1, wherein the composite is produced by multicomponent injection molding, coextrusion or coextrusion blow molding.

32. (Currently Amended) A composite having two or more layers and comprising:

a layer I obtained from a molding composition comprising:

a) from 0 to 80 parts by weight of a polyamide selected from the group consisting of polyamide 6, polyamide 66, polyamide 6/66 and a mixture thereof;

b) from 0 to 100 parts by weight of a polyamine-polyamide copolymer prepared from the following monomers:

α) from 0.5 to 25% by weight, based on the polyamine-polyamide copolymer, of a polyamine having at least 4 nitrogen atoms and having a number-average molecular weight M_n of at least 146 g/mol, and

β) a polyamide-forming monomer selected from the group consisting of a lactam, a ω-aminocarboxylic acid, an equimolar combination of a diamine and a dicarboxylic acid and a mixture thereof; and

c) from 0 to 80 parts by weight of a polyamide selected from the group consisting of polyamide 11, polyamide 12, polyamide 612, polyamide 1012, polyamide 1212 and a mixture thereof;

wherein a total of said polyamide a) and said polyamine-polyamide copolymer b) contains at least 20 parts by weight of a monomer unit which is obtained

i) by ring-opening polymerization of caprolactam, or

ii) by polycondensing hexamethylenediamine and adipic acid, or

iii) by copolycondensing caprolactam, hexamethylenediamine and adipic acid; and

wherein a total of said polyamine-polyamide copolymer b) and said polyamide c) contains at least 20 parts by weight of a monomer unit which is obtained by polycondensing of ω-aminoundecanoic acid, or ring-opening and polycondensing of laurolactam, or polycondensing of at least one of the following mixtures: a mixture of hexamethylenediamine

and 1,12-dodecanedioic acid, a mixture of 1,10-decanediamine and 1,12-dodecanedioic acid, a mixture of 1,12-dodecanediamine and 1,12-dodecanedioic acid;

wherein the molding composition of layer I is obtained by subjecting a blend comprising polyamide a) and said polyamide c) to solid-phase post-condensation;

wherein at least one of a) or c) is present.

33. (Original) The composite according to Claim 32, wherein a temperature of said solid-phase post-condensation is from 140°C to about 5 K below a crystalline melting point T_m of the polyamides.

34. (Currently Amended) A composite having two or more layers and comprising:

a layer I obtained from a molding composition comprising:

a) from 0 to 80 parts by weight of a polyamide selected from the group consisting of polyamide 6, polyamide 66, polyamide 6/66 and a mixture thereof;

b) from 0 to 100 parts by weight of a polyamine-polyamide copolymer prepared from the following monomers:

α) from 0.5 to 25% by weight, based on the polyamine-polyamide copolymer, of a polyamine having at least 4 nitrogen atoms and having a number-average molecular weight M_n of at least 146 g/mol, and

β) a polyamide-forming monomer selected from the group consisting of a lactam, a ω-aminocarboxylic acid, an equimolar combination of a diamine and a dicarboxylic acid and a mixture thereof; and

c) from 0 to 80 parts by weight of a polyamide selected from the group consisting of polyamide 11, polyamide 12, polyamide 612, polyamide 1012, polyamide 1212 and a mixture thereof;

wherein a total of the parts by weight of components a), b) and c) is 100;

wherein a total of said polyamide a) and said polyamine-polyamide copolymer b) contains at least 20 parts by weight of a monomer unit which is obtained

i) by ring-opening polymerization of caprolactam, or

ii) by polycondensing hexamethylenediamine and adipic acid, or

iii) by copolycondensing caprolactam, hexamethylenediamine and adipic acid; and

wherein a total of said polyamine-polyamide copolymer b) and said polyamide c) contains at least 20 parts by weight of a monomer unit which is obtained by polycondensing of ω-aminoundecanoic acid, or ring-opening and polycondensing of laurolactam, or polycondensing of at least one of the following mixtures: a mixture of hexamethylenediamine and 1,12-dodecanedioic acid, a mixture of 1,10-decanediamine and 1,12-dodecanedioic acid, a mixture of 1,12-dodecanediamine and 1,12-dodecanedioic acid;

wherein either polyamide a) or c) contains an excess of amino end groups and the other polyamide contains an excess of carboxyl end groups;

wherein at least one of a) and c) is present.

35. (Currently Amended) A composite having two or more layers and comprising:

a layer I obtained from a molding composition comprising:

a) from 0 to 80 parts by weight of a polyamide selected from the group consisting of polyamide 6, polyamide 66, polyamide 6/66 and a mixture thereof;

b) from 0 to 100 parts by weight of a polyamine-polyamide copolymer prepared from the following monomers:

α) from 0.5 to 25% by weight, based on the polyamine-polyamide copolymer, of a polyamine having at least 4 nitrogen atoms and having a number-average molecular weight M_n of at least 146 g/mol, and

β) a polyamide-forming monomer selected from the group consisting of a lactam, a ω-aminocarboxylic acid, an equimolar combination of a diamine and a dicarboxylic acid and a mixture thereof; and

c) from 0 to 80 parts by weight of a polyamide selected from the group consisting of polyamide 11, polyamide 12, polyamide 612, polyamide 1012, polyamide 1212 and a mixture thereof;

wherein a total of the parts by weight of components a), b) and c) is 100;

wherein a total of said polyamide a) and said polyamine-polyamide copolymer b) contains at least 20 parts by weight of a monomer unit which is obtained

i) by ring-opening polymerization of caprolactam, or

ii) by polycondensing hexamethylenediamine and adipic acid, or

iii) by copolycondensing caprolactam, hexamethylenediamine and adipic acid; and

wherein a total of said polyamine-polyamide copolymer b) and said polyamide c) contains at least 20 parts by weight of a monomer unit which is obtained by polycondensing of ω-aminoundecanoic acid, or ring-opening and polycondensing of laurolactam, or polycondensing of at least one of the following mixtures: a mixture of hexamethylenediamine and 1,12-dodecanedioic acid, a mixture of 1,10-decanediamine and 1,12-dodecanedioic acid, a mixture of 1,12-dodecanediamine and 1,12-dodecanedioic acid;

wherein components a) and c) are linked by adding a reactive compound which links the polyamide end groups to one another;

wherein a) and c) are present.

36. (Original) The composite according to Claim 35, wherein said reactive compound is selected from the group consisting of a bisoxazoline, a biscarbodiimide, a bismaleimide, a bisanhydride, a diisocyanate and a mixture thereof.

37. (Previously Presented) The composite according to Claim 26, which is a container, or a filler pipe.